

SOME MICROVELIA FROM SOUTHERN BRAZIL

(Hemiptera: Veliidae)

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This paper is a report on a collection of waterstriders of the genus *Microvelia* Westwood from the vicinity of Nova Teutonia, Province of Santa Catharina, Brasil, taken by Plaumann. The collection contains 11 species, including two described herein as new to science. In addition to the two new forms, the collection includes species as follows: *M. longipes* Uhler; *M. incerta* Kirby, *M. stellata* Kirkaldy, *M. braziliensis* McKinstry, *M. venustatis* Drake and Harris, *M. inannana* Drake, *M. mimula* B-White, *M. minima* Drake and *M. limaiana* Drake. The species, except *stellata* Kirk, were all netted in moderately large numbers.

***Microvelia novana*, n. sp.**

APTEROUS FORM: Moderately long, slender (male), much broader (female), testaceous with blackish fuscous areas as described in structures; head, pronotum and tergites with some bluish bloom. Head moderately convex above, with two rows of punctures on median longitudinal line, brownish testaceous with sides (including dorsal surface bordering eyes) and apex black-fuscous; eyes large, blackish. Rostrum testaceous with tip black-fuscous and shining. Antennae rather long, rather densely pilose, dark fuscous with some testaceous on basal part of first segment, measurements (male) — I, 18; II, 13; III, 30; IV, 42 and (female) — I, 16; II, 12; III, 22; IV, 36. Legs moderately long, unarmed in both sexes, femora (viewed from above) of nearly equal thickness, dark fuscous with coxae, trochanters, most of middle and fore femora and hind femora and tibiae (most of dorsal surface fuscous) testaceous; hind femora (male) slightly bowed, with ventral surface strongly flattened (slightly convex) and rather densely fringed on both fore and hind margins with pale hairs, tibiae feebly bowed, with underside slightly convex.

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Pronotum large, broadly produced posteriorly, with hind margin slowly rounded, concealing about two-thirds of mesonotum; front lobe demarcated behind by a transverse row of large dark punctures, about one-half as long as hind lobe. Abdomen above largely brownish testaceous with sutures separating segments of tergites and connexiva blackish fuscous, sometimes some of the tergites mostly blackish. Entire body beneath testaceous, the sides of thorax and abdomen with wide blackish fuscous bands. Male genital segments moderately large, dark fuscous, without lateral projections; first segment not widened posteriorly, with sides rounded, beneath deeply widely roundly incised on hind margin. Abdominal segments beneath without spines or tubercles. Anterior tibiae widened apically, with a short apical comb. Length of middle femora 0.62 mm., the tibiae 0.55 mm.; hind femora 0.70 mm. long, the tibiae 0.75 mm. Tibiae of middle and hind legs with segment I a little shorter than II. Length, 2.25 mm.; width, 0.68 mm. Female: Stoutier than male; connexiva wider, erect, neither widened nor reflexed behind. Last segment of venter nearly one-half longer than the preceding segment. Legs without spines and unmodified. Length, 2.00 mm.; width, 0.75 mm.

MACROPTEROUS FORM: Pronotum nearly pentagonal in shape, blackish fuscous with a short transverse flavous band in front, moderately convex, with humeral angles slightly elevated and moderately prominent, wider across humeri than median length (72:56). Hemelytra as long as abdomen, dark fuscous with two longitudinal basal stripes and three to five rounded spots beyond the middle silvery white, with only a few hairs on exterior basal margin. Length, 2.55 mm.; width, 0.80 mm.

TYPE (male) and **ALLOTYPE** (female), both apterous, Nova Teutonia, Santa Catharina, Brasil, Nov., 1953, in Drake Collection. **Paratypes:** 32 specimens, apterous and macropterous, same data as type.

Very much like the Brazilian *M. costaiana* Drake and Hussey in size and form, but easily distinguishable by the slightly bowed and strongly flattened inferior side of posterior femora of male, which is also fringed there on each outer edge with pale hairs. In the male of *costaiana*, the underside of the hind femora is rounded or convex beneath, also unarmed, and the venter is broadly flattened beneath on the median longitudinal line; female and winged forms unknown.

***Microvelia aemulana*, n. sp.**

APTEROUS FORM: Small, rather slender (male) or broader (female), brownish testaceous with small fuscous areas or much larger fuscous areas, as described in structures; dorsal surface

with some bluish pruinose. Head slightly convex above, with median longitudinal line distinct and punctate. Antennae dark fuscous with basal part of first segment testaceous, shortly pilose, measurements—I, 16; II, 11; III, 20; IV, 32 (both sexes). Rostrum testaceous with last segment fuscous, nearly reaching to middle of mesosternum. Legs moderately long, rather slender, unarmed, dark brown with base of anterior femora above and all femora beneath testaceous; middle femora not quite as stout as hind, longer than tibiae (40:32); length of hind femora and tibiae subequal (40:42).

Pronotum brownish testaceous, sometimes dark fuscous in front, nearly flat, widely projected posteriorly, concealing about three-fifths of mesonotum, with posterior margin wide and a little concave at the middle, with scattered small punctures; front lobe not prominently set-off from hind lobe on account of small pits between lobes, about half as long as hind lobe.

MALE: Abdomen slowly tapering posteriorly, with a large dark fuscous spot at the base; last tergite wide behind, about one-half longer than the preceding segment; entire body beneath testaceous, the inferior surface of abdomen without a tubercle or spine. First genital segment above dark brown, widened posteriorly, widest and truncate on posterior margin, there as wide as last tergite; beneath very widely, deeply and roundly excavated on hind margin; second genital segment armed on each side (near hind margin) with a long, slender, straight, laterally-projected, testaceous spine; without armature or modifications on femora or venter. Length, 1.65 mm.; with, 0.58 mm.

FEMALE: Much broader, stouter and generally darker than male. Antennal and legs very similar to male. Connexiva wider, erect, not reflexed behind. Length, 1.85 mm.; width, 0.75 mm.

TYPE (male) and ALLOTYPE (female) both apterous, San Paula, Brazil, July 22, 1952, E. J. Hambleton, Drake Collection. PARATYPES (26 specimens): Nova Teutonia, San Catharina, Nov. 1953; Buenos Aires, Arg., Nov. 23, 1938, C. J. Drake; and specimens taken with type.

Very similar in size, color and general appearance to *M. mimula* B. -White, males each of both species have the same general type of genital segment with a long lateral spine on each side of the third segment. However, the male *mimula* has armed hind femora and the penultimate tergite of the venter bear a small tubercle on the median line just in front of the hind margin. These structures are not found in the male *novana*, n. sp. *Mimula* is very widely distributed and ranges from Puerto Rico and Trinidad of the West Indies south as far as Buenos Aires, Arg.